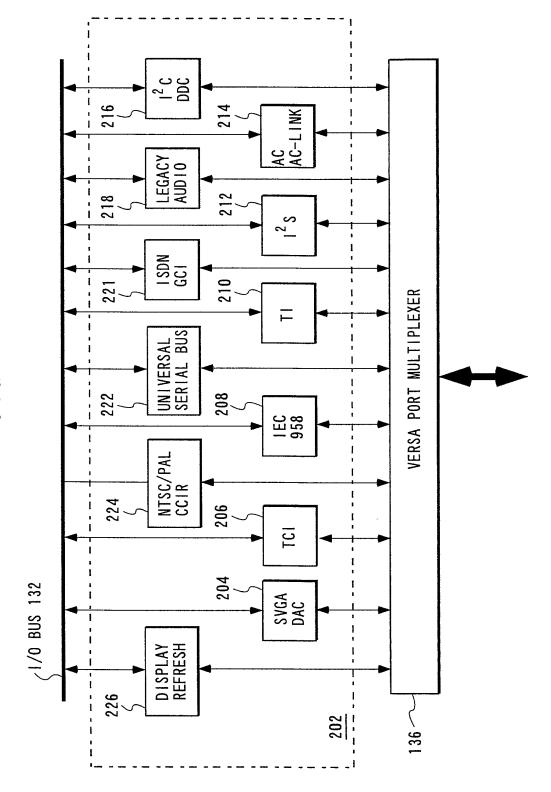
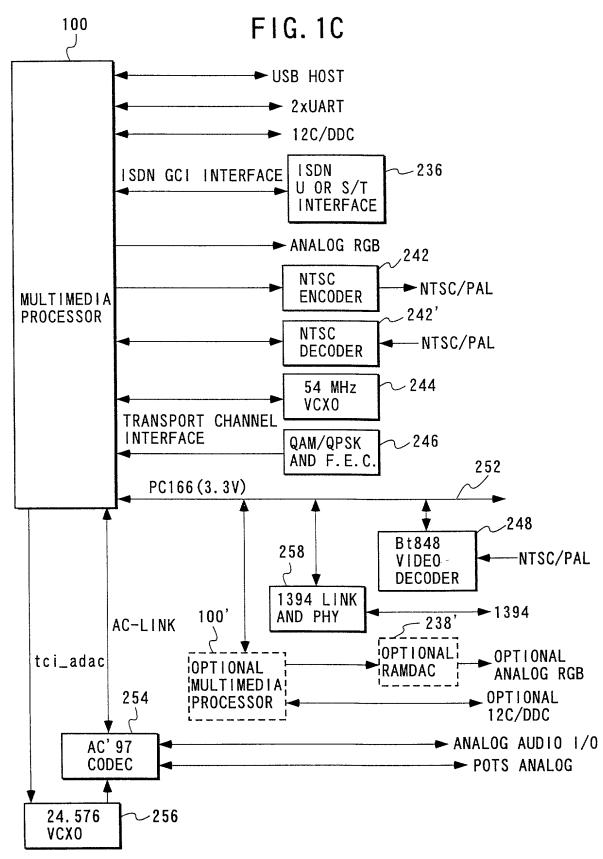
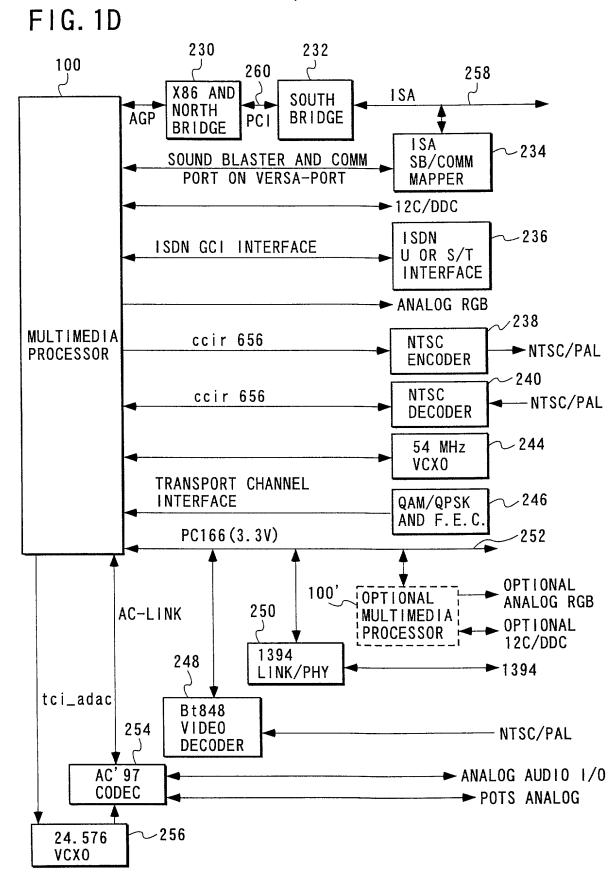
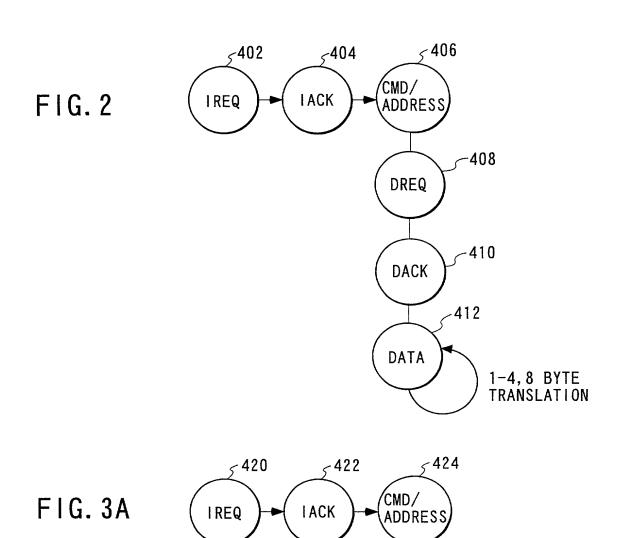


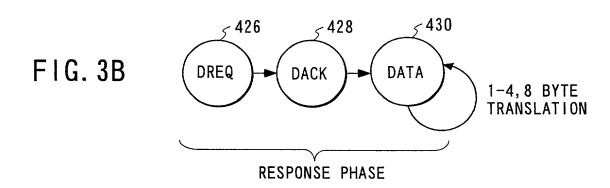
FIG. 1B











SEND PHASE

FIG. 4A

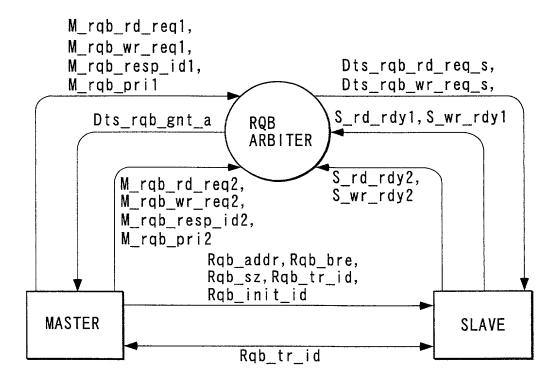
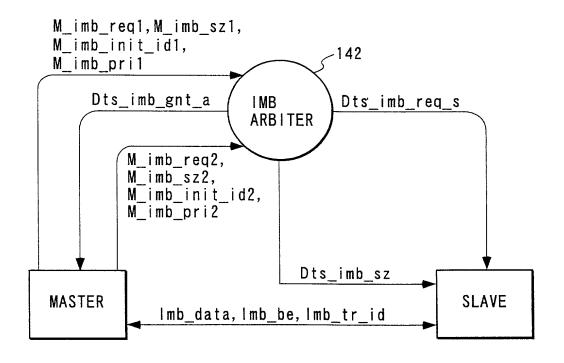
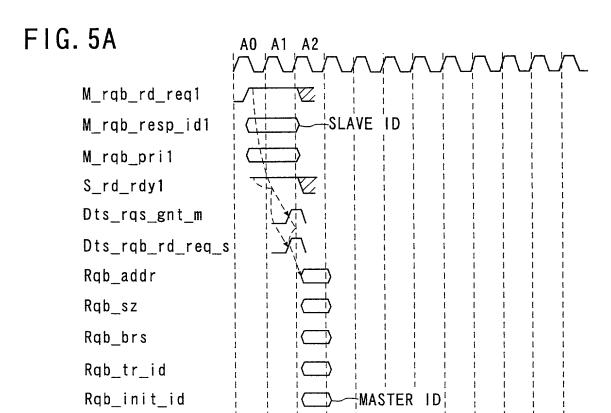
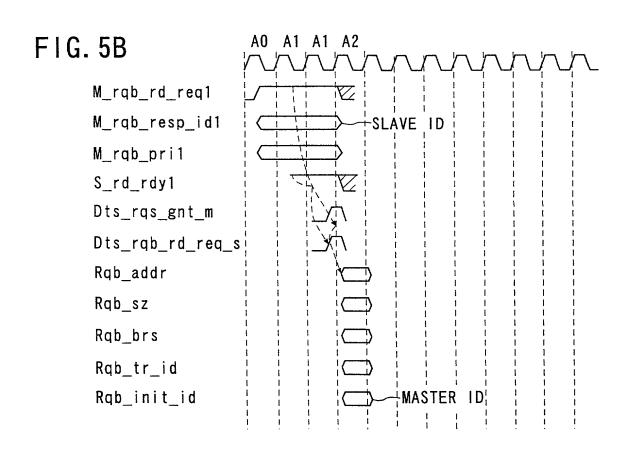
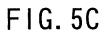


FIG. 4B









M_rqb_wr_req1
M_rqb_resp_id1
M_rqb_pri1
S_wr_rdy1
Dts_rqs_gnt_m
Dts_rqb_wr_req_s
Rqb_addr
Rqb_sz

Rqb_tr_id
Rqb_init_id

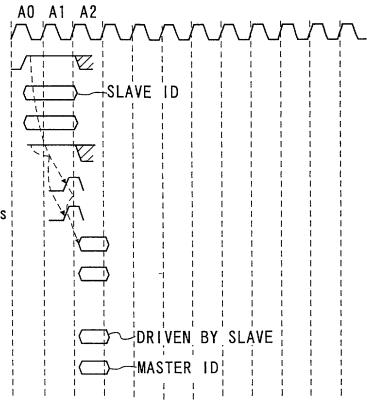


FIG. 5D

M_imb_req1

M_imb_init_id1

M_imb_pri1

M_imb_sz1

Dts_imb_gnt_m

Dts_imb_req_s

Imb_data

Imb_be

Imb_tr_id

Dts_imb_sz

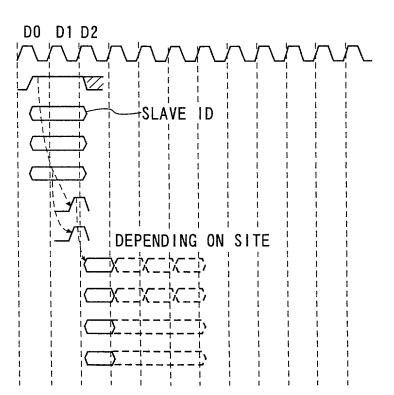


FIG. 6A

M_rqb_rd_req1
M_rqb_resp_id1
M_rqb_pri1
M_rqb_rd_req2
M_rqb_resq_id2
M_rqb_pri2
Dts_rqb_gnt_m
Rqb_addr
Rqb_sz
Rqb_bre
Rqb_tr_id

Rqb_init_id

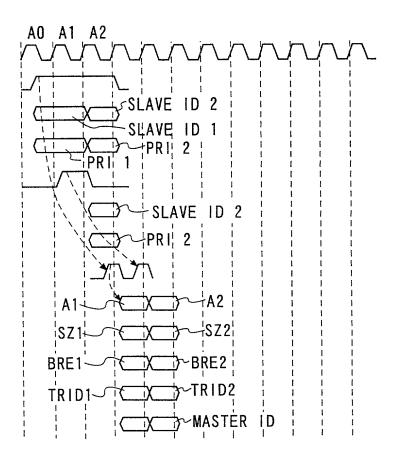
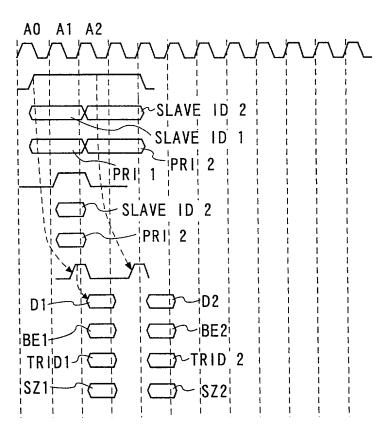
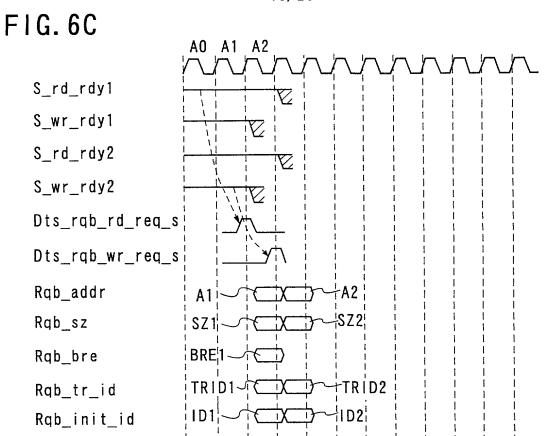


FIG. 6B

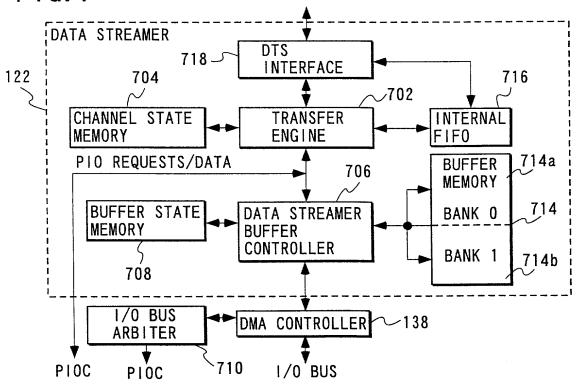
M_pmb_req1
M_pmb_init_id1
M_pmb_pri1
M_pmb_req2
M_pmb_init_id2
M_pmb_pri2
Dts_pmb_gnt_m
Pmb_data
Pmb_be
Pmb_tr_id

Dts_pmb_sz









11/29

FIG.8

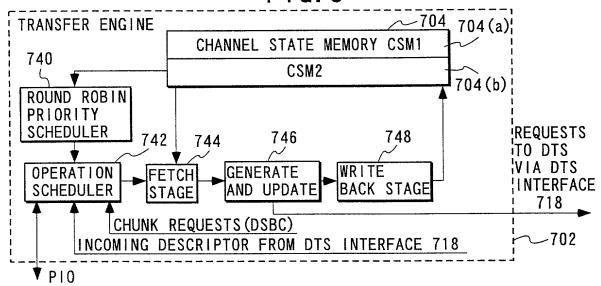


FIG. 9

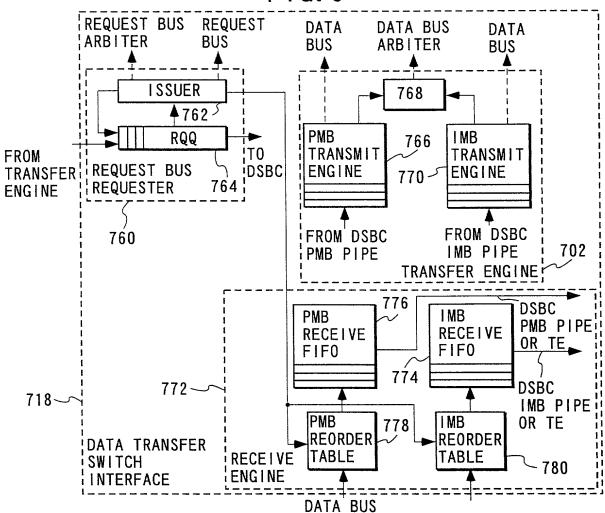
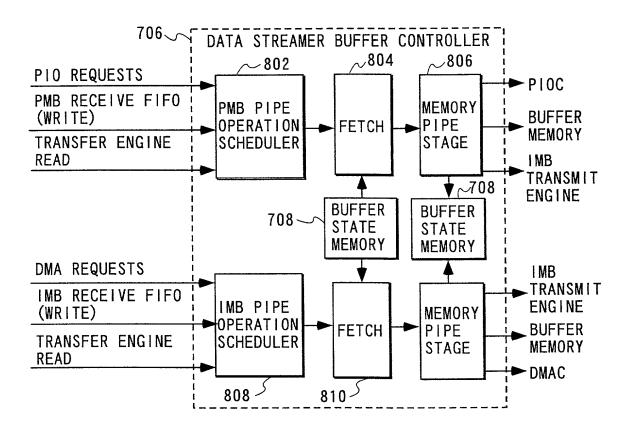
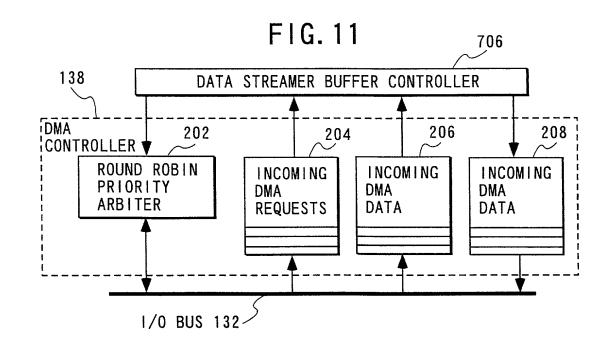
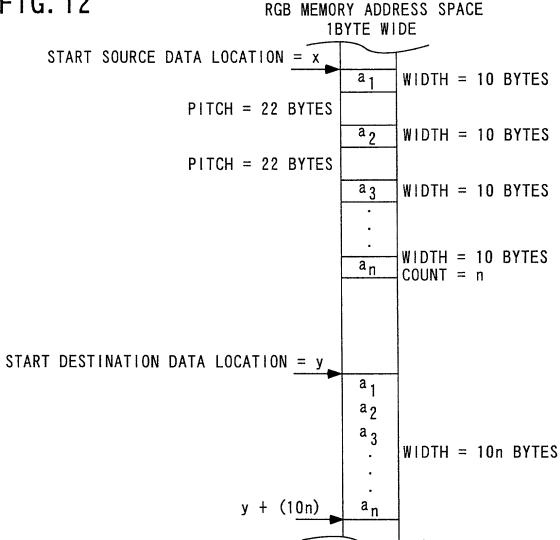


FIG. 10









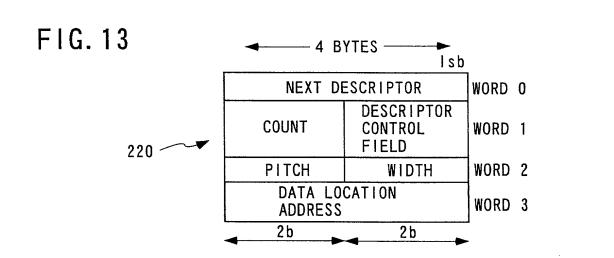


FIG. 14

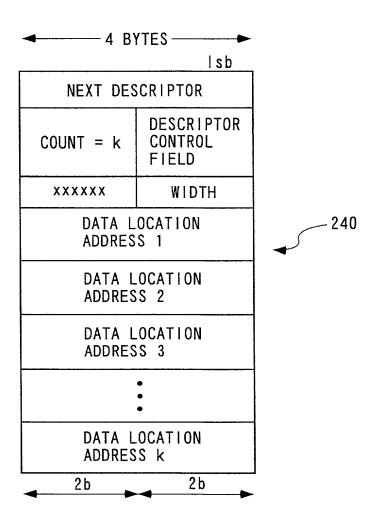


FIG. 15A

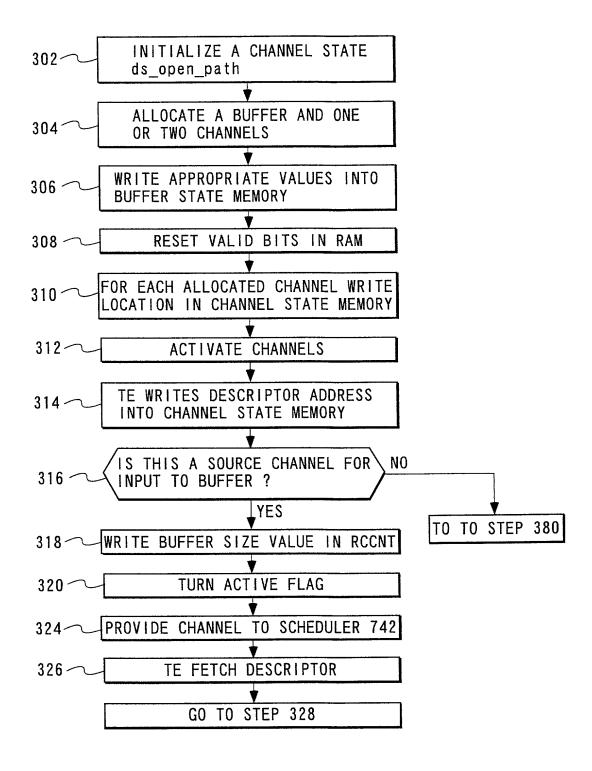
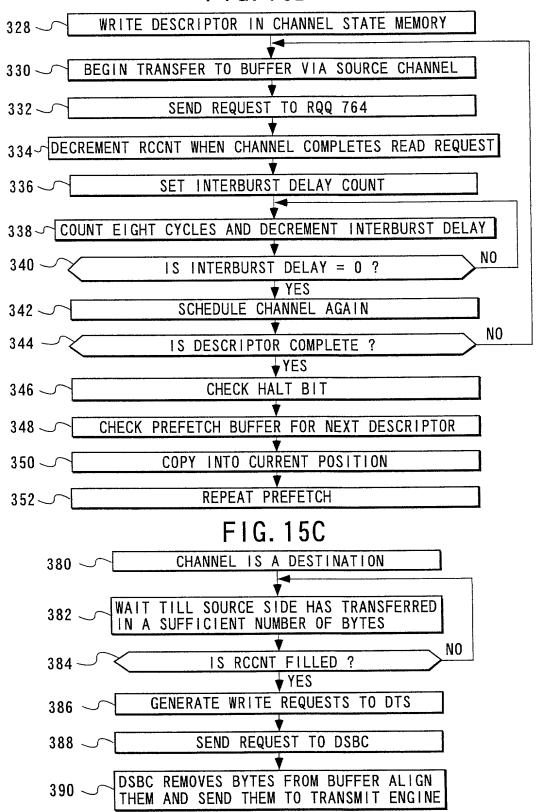
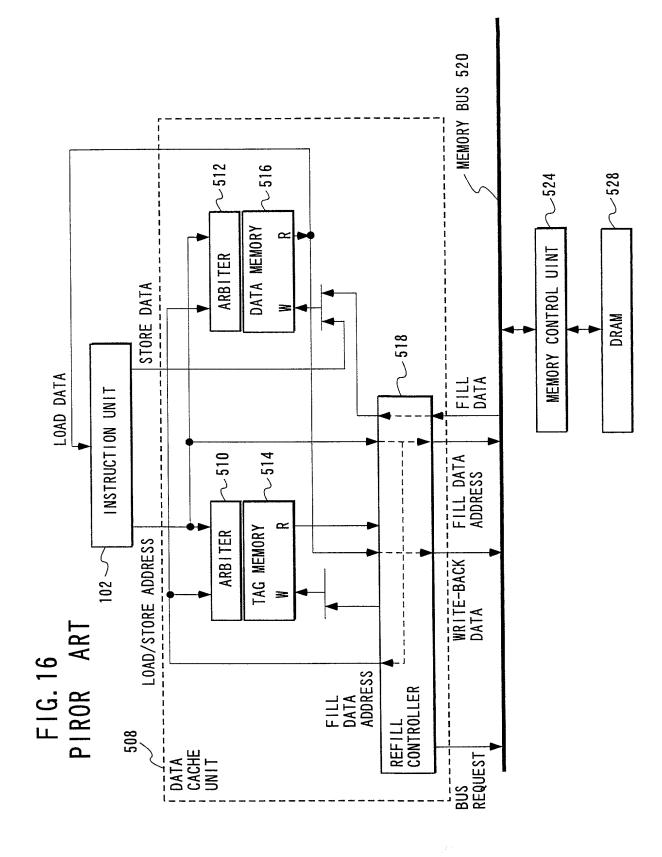


FIG. 15B





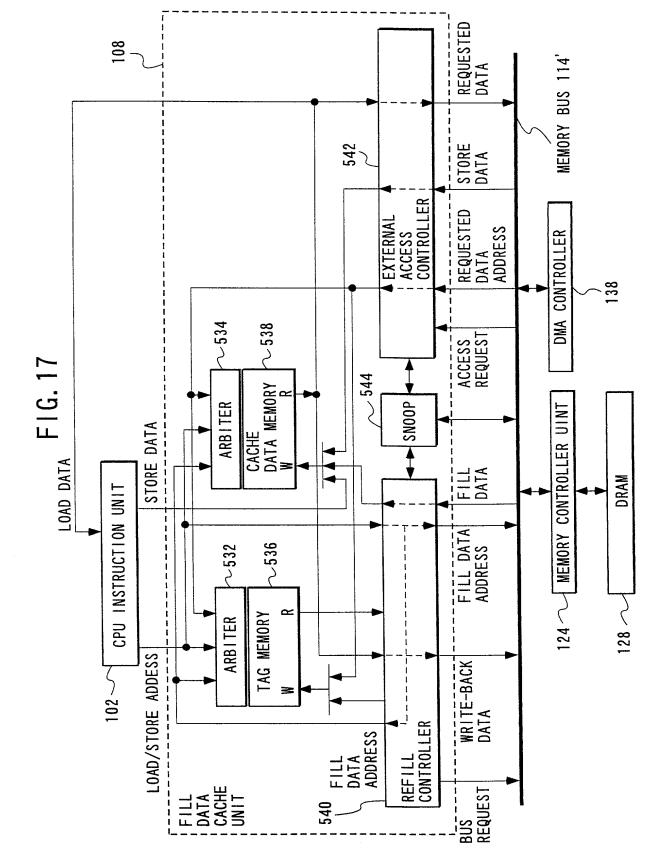
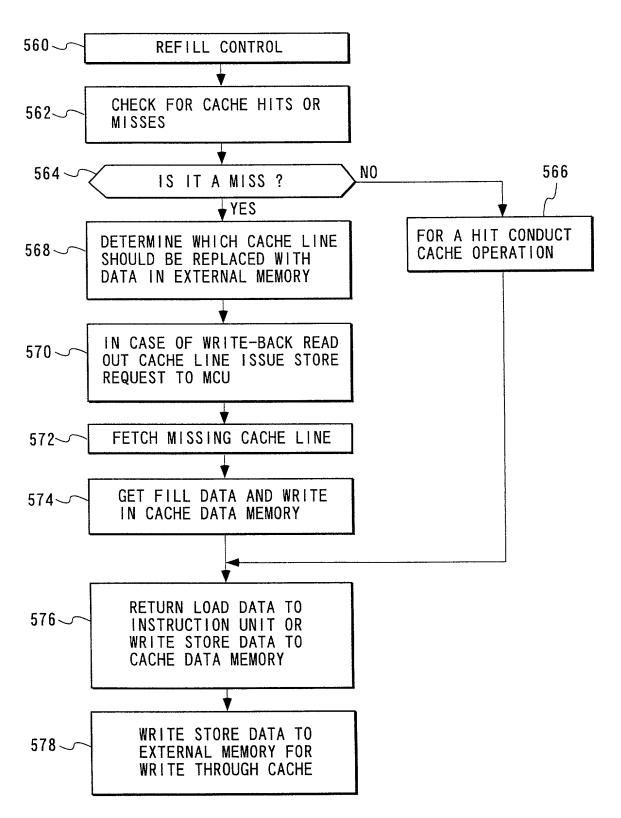
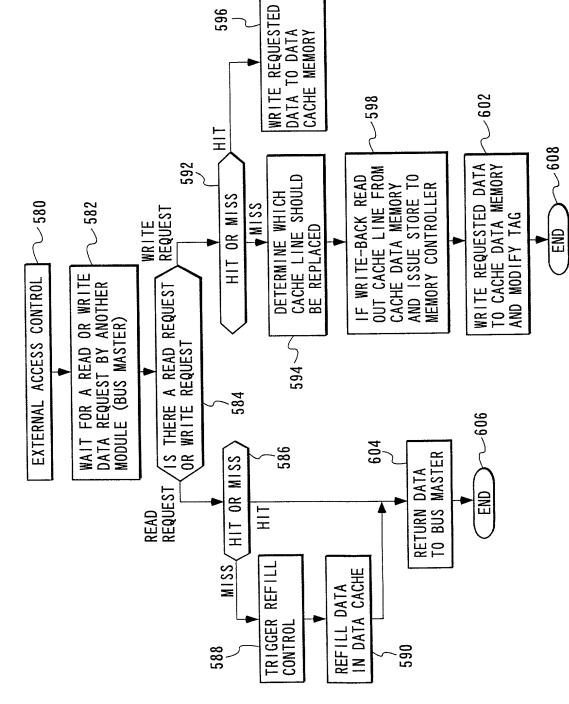


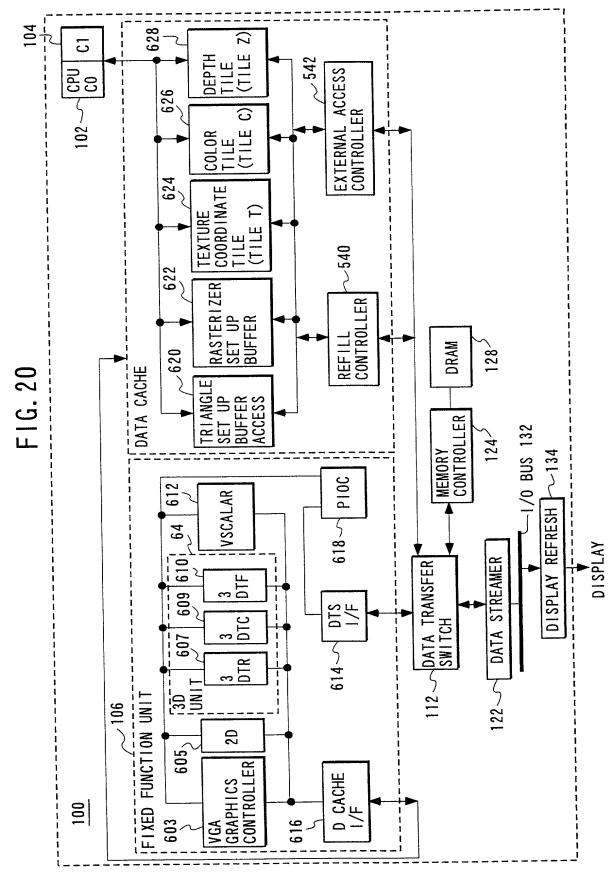
FIG. 18

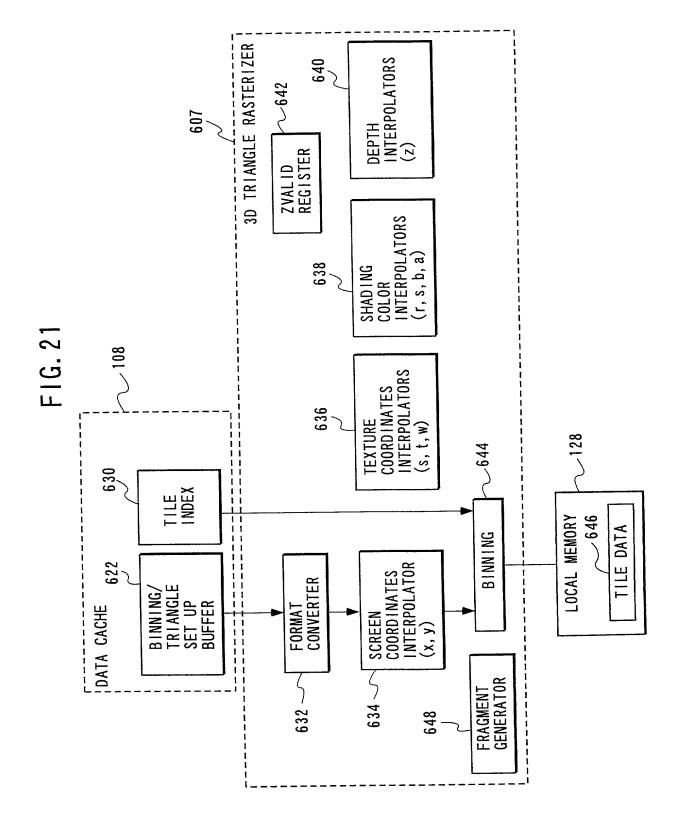












128

FIG. 22 108 DATA CACHE 628 626 624 650 622 **TEXTURE** COLOR DEPTH **RASTERIZER** COORDINATE FRAGMENT TILE TILE SET UP TILE (TILE C) INDEX (TILE Z) **BUFFER** (TILE T) $\sqrt{642}$ 3DTR ZVALID **FORMAT 632** REGISTER CONVERSION 640 638 636 634 **TEXTURE** SHADING **SCREEN** DEPTH COLOR COORDINATES COORDINATES INTERPOLATORS INTERPOLATOR INTERPOLATORS INTERPOLATORS (z) (s, t, w) (r, g, b, a)(x, y)649 648 FRAGMENT GENERATION BINNING! 658 258 654 656 652 DEPTH OF **TEXTURE** COLOR OF **FRAGMENT** COORDINATES **FRAGMENT FRAGMENT** (TILE Z OF FRAGMENT (TILE C LINK FRAGMENT) (TILE T FRAGMENT) FRAGMENT) LOCAL MEMORY

FIG. 23

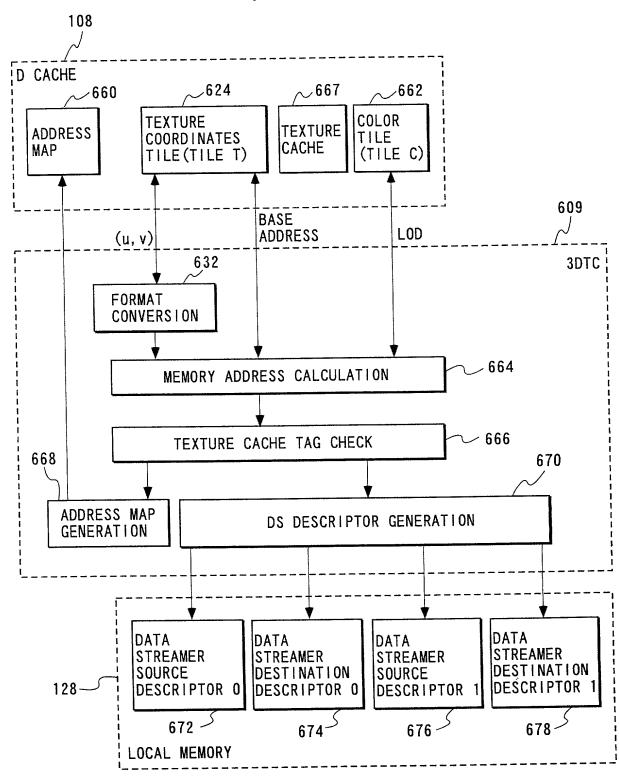
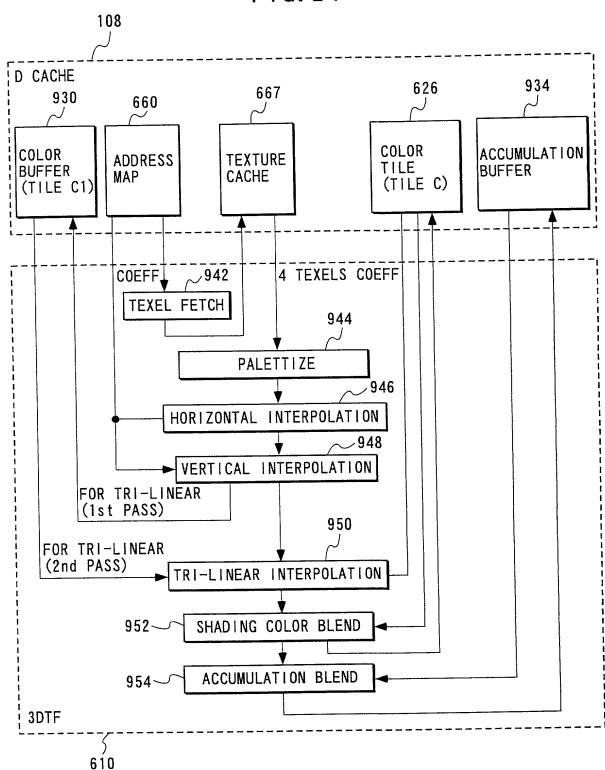


FIG. 24



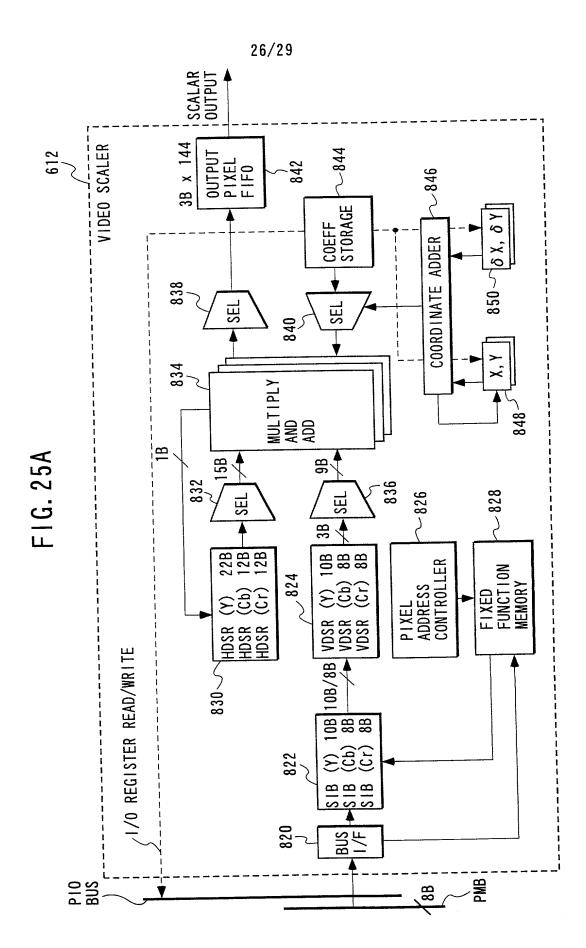
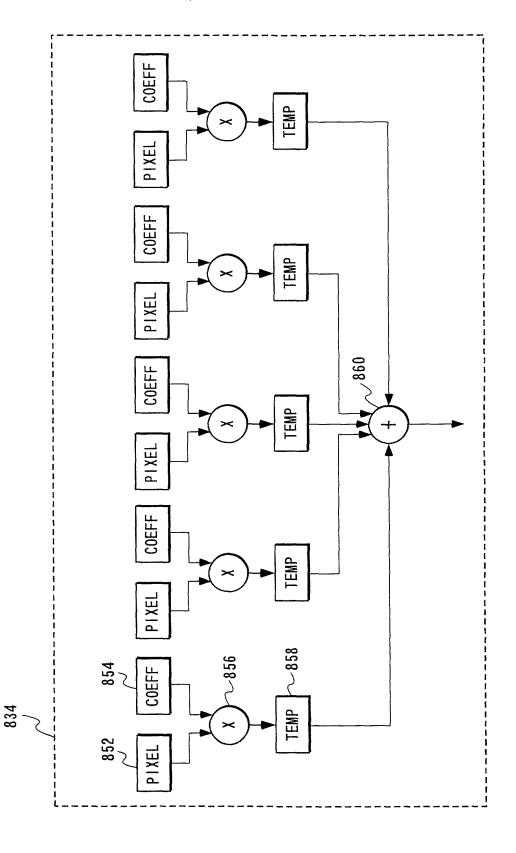
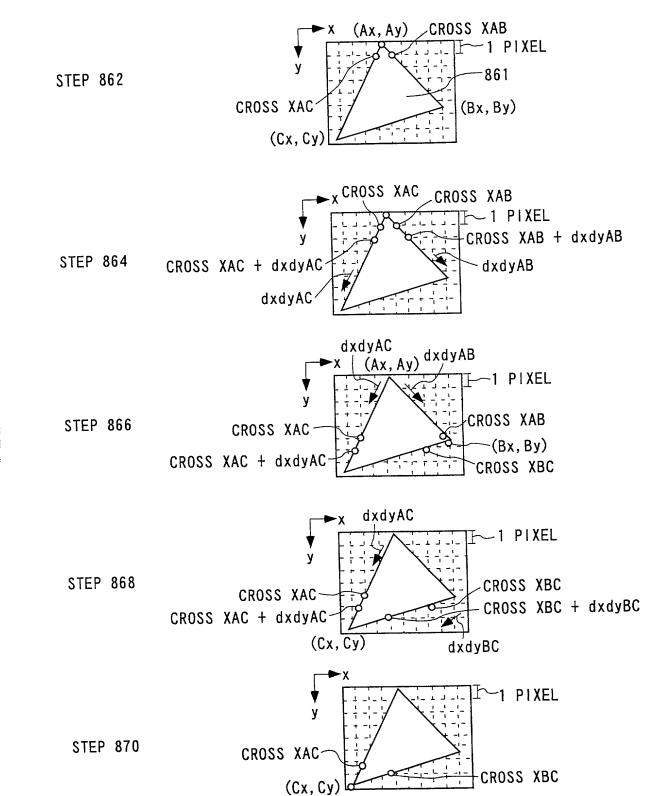


FIG. 25B



28/29 FIG. 26



29/29

FIG. 27

1 1 41 2 .	
GEOMETRY/LIGHTING FOR ALL TRIANGLES IN A FRAME, VLIW CALCULATES SCREEN COORDINATES, COLORS, AND BINNING PARAMETERS	880
ACTIVATE FFU IN BINNING MODE	882
DETERMINE TILE INDEX AND TILE DATA	884
FOR ALL BINS IN A FRAME PERFORM SET UP AND RASTERIZATION	886
FOR ALL TRIANGLES IN A BIN VLIW CALCULATES TRIANGLE SET UP DATA	888
CALCULATE DADANGTEDS FOR DENDEDING V. V. 7 DCDA	890
ACTIVATE FFU IN INTERPOLATION MODE	892
FOR ALL PIXELS IN A BIN VLIW CALCULATES u, v, FROM s, t, w	894
3D FFU CALCULATES TEXTURE ADDRESS WHEN 3D TEXTURE CONTROLLER UNIT IS ACTIVATED IN TEXTURE CALCULATION MODE	896
DATA STREAMER FETCHES TEXELS BY GIVING CALCULATED TEXTURE ADDRESS	898
ACTIVE VIDEO SCALER TO PERFORM BI-LINEAR TEXTURE FILTERING	900
ANTI ALIASING ~	902
FOR ALL PIXELS IN A FRAGMENT VLIW CALCULATE u, v, FROM s, t, w	904
3D ACCELERATOR TEXTURE ADDRESS CALCULATION ~	906
ACTIVATE DATA STREAMER	908
DATA STREAMER FETCHES TEXELS	910
VIDEO SCALER PERFORMS TEXTURE FILTERING AND BLENDING	912
STORE FRAME BUFFER	914
	916
END 918	